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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KNOLL, CLIFFORD H

ART UNIT	PAPER NUMBER
2112	

DATE MAILED: 04/13/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

SC

Office Action Summary

Application No.

09/846,975

Applicant(s)

PACKER ET AL.

Examiner

Clifford H Knoll

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

In claim 1, This Action is in response to communication received 1/12/04. Claims 2, 19-28 have been cancelled. Claims 1, 3-18 are pending in the current Office Action.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1 and 3-18 stand rejected under 35 U.S.C. 102(e) as being anticipated by Benson (US 6567879).

Regarding claim 1, Benson discloses an expander device for isolating segments with a first I/O interface circuit being adapted to interface input and output communication signals with the first bus segment (e.g., col.3, lines 9-11); a second I/O interface circuit configured to be coupled to a second bus segment and being adapted to interface the input and output communication signals with the second bus segment (e.g., col.3, lines 12-14); and an expander controller coupled to communicate the input and output communication signals between the first and second I/O interface circuits, controlling communication between bus segments, including a segment controller adapted to generate a first signal to disable output of the communication signals from

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the first and second I/O interface circuits to the first and second bus segments (e.g., col.3, lines 27-31), where the disabling isolates the bus segments in an isolation mode which *allows* communication but does not transmit them to the other bus segment (e.g., col.3, lines 29-31 "split bus mode").

Regarding claim 3, Benson further the expander device is adapted to receive the communication signals from the first and second bus segments while in isolation mode (e.g., col.3, lines 48-51).

Regarding claim 4, Benson still further discloses where the segment controller generates the first signal in response to an isolation command received from the first bus segment (e.g., col.2, lines 5-15).

Regarding claim 5, Benson still further discloses deasserting the first signal to exit the isolation mode (e.g., col.2, lines 9-11).

Regarding claim 6, Benson still further discloses deasserting when the second bus segment is in a bus free state (e.g., col.2, lines 9-11).

Regarding claim 7, Benson still further discloses the input and output buffers (e.g., col.3, lines 26-29).

Regarding claim 8, Benson still further discloses driving the communication signals for input and output (e.g., col.3, lines 23-26, Figure 1, items 44, 46).

Regarding claim 9, Benson still further discloses the first signal disables the first and second output buffers to disable the output (e.g., col.3, lines 23-26).

Regarding claim 10, bus segments are SCSI bus segments and the expander controller is a SCSI controller (e.g., col. 2, lines 46-49).

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Regarding claim 11, Benson discloses the expander and method where a first I/O interface circuit is adapted to interface input and output communication signals with the first bus segment (e.g., col.3, lines 9-11); a second I/O interface circuit is adapted to interface the input and output communication signals with the second bus segment (e.g., col.3, lines 12-14); and an expander controller coupled to communicate the input and output communication signals between the first and second I/O interface circuits, controlling communication between bus segments, including a segment controller adapted to generate a first signal to disable output of the communication signals from the first and second I/O interface circuits to the first and second bus segments thereby isolating first and second SCSI I/O interface circuits to the first and second SCSI bus segments so communication signals received on one segment are *allowed but not transmitted* on the other (e.g., col.3, lines 27-31).

Regarding claim 19, Benson discloses receiving by the expander an isolation command from a host computer on the first bus segment, the isolation command being configured to instruct the expander to isolate the first bus segment from the second bus segment and configuring the expander operating to prevent communication signals received on one bus segment from being output onto the other bus segment (e.g., col.3, lines 14-18).

Regarding claims 12 and 20, Benson also the expander device is adapted to receive the communication signals from the first and second bus segments while in isolation mode (e.g., col.3, lines 48-51).

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Regarding claims 13 and 22, Benson also discloses where the segment controller generates the first signal in response to an isolation command received from the first bus segment (e.g., col.2, lines 5-15).

Regarding claims 14 and 23, Benson further discloses deasserting the first signal to exit the isolation mode (e.g., col.2, lines 9-11).

Regarding claims 15 and 24, Benson still further discloses deasserting when the second bus segment is in a bus free state (e.g., col.2, lines 9-11).

Regarding claims 16 and 25, Benson still further discloses the input and output buffers (e.g., col.3, lines 26-29).

Regarding claims 17 and 26, Benson still further discloses driving the communication signals for input and output (e.g., col.3, lines 23-26, Figure 1, items 44, 46).

Regarding claims 18 and 27, Benson still further discloses the first signal disables the first and second output buffers to disable the output (e.g., col.3, lines 23-26).

Regarding claim 21, Benson also discloses a first I/O interface (e.g., col.3, lines 9-11); a second I/O interface (e.g., col.3, lines 12-14); and an expander controller coupled to communicate the input and output communication signals between the first and second I/O interface circuits, controlling communication between bus segments, including a segment controller adapted to generate a first signal to disable output of the communication signals from the first and second I/O interface circuits to the first and

second bus segments thereby isolating first and second SCSI I/O interface circuits to the first and second SCSI bus segments (e.g., col.3, lines 27-31).

Regarding claim 28, bus segments are SCSI bus segments and the expander controller is a SCSI controller (e.g., col. 2, lines 46-49).

Thus claims 1, 3-18 stand rejected.

Response to Arguments

Applicant's arguments filed 1/12/04 have been fully considered but they are not persuasive. Applicant argues that recitation in amended claims 1 and 11, wherein "signals ...are *allowed* but not transmitted to the other bus segment" serves to distinguish over the Benson. Citing Benson, Applicant argues that that Benson, "in full mode, one of the isolators will be turned off in favor of the other bus" (p. 8); however the full mode of Benson is not relied upon for the rejection. Rather, as the cited passage allows, Benson teaches a split mode where "both SE to SE isolator 26 and SE to SE isolator 46 are disabled" (cited supra, and also quoted by Applicant, p. 8, in a broader passage). Just to be clear, when Benson states that an "isolator" is "disabled" he does not mean that *isolation* is somehow circumvented, but rather, that the connection provided by the isolator is disabled. This is clear from a reading of Benson and in particular from his terminology of "split-mode" which is the feature relied upon in the rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clifford H Knoll whose telephone number is 703-305-8656. The examiner can normally be reached on M-F 0630-1500.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark H Rinehart can be reached on 703-305-4815. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER